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EVALUATION OF AN STD/HIV PREVENTION TRAIN-THE-TRAINER PROGRAM

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Evaluation of an STD/HIV Prevention Train-the-Trainer Program

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Human subjects participated in this study after giving their free and informed consent. This research has been conducted in compliance with all applicable Federal Regulations governing the Protection of Human Subjects in Research.

Summary

Problem

Unsafe sex among military personnel is of particular concern because military members may be at especially high risk for sexually transmitted diseases (STDs) and HIV due to their demographic characteristics (e.g., young age and predominantly male gender), their frequent deployments, and their assignments to foreign countries with high rates of HIV. However, there have been few studies of STD/HIV interventions among U.S. military personnel.

Objective

The objective of this project was to implement and evaluate the STD/HIV Intervention Program (SHIP) in a sample of Navy preventive medicine technicians (PMTs).

Approach

A behavioral intervention known as SHIP was modified and restructured as a “train-the-trainer” course for the PMT population. The 2-day course was implemented in the PMT school at the Naval School of Health Sciences, San Diego, CA, for a period of 2 years. Course evaluation questionnaires were administered to PMT students immediately after the training. Follow-up interviews evaluating the SHIP course were conducted with 73 PMTs 1 year after they received the training.

Results

Results of the course evaluation questionnaires indicated that the PMTs were fairly satisfied with the SHIP course overall, most had found the course to be useful in terms of preparing them to teach others about STD/HIV prevention, and most said that they would recommend the course to other PMTs. Results of the 1-year follow-up interviews revealed that more than three quarters of the PMTs (78%) had given formal training on STDs/HIV during the past year. Of the PMTs who had given training, 68% had used the SHIP manual, 63% had used one or both of the SHIP videos, and 47% had used some or all of the slides. PMTs reported liking the training videos the most.

Conclusions

Each of the objectives of this study was achieved. The original SHIP course was modified to make it appropriate for the PMT population and to fit a train-the-trainer format. In addition, a process evaluation of the intervention was conducted. The PMT students were fairly satisfied with the SHIP course overall, as well as with specific components of the course. As hypothesized, the SHIP train-the-trainer course was considered useful by most PMTs in their first duty assignments after completing PMT school.

Introduction

HIV/AIDS is undoubtedly the most important infectious disease epidemic of the late twentieth century. As of 1997, the Centers for Disease Control and Prevention estimated that about 270,000 people in the United States had AIDS (Centers for Disease Control & Prevention, 1998). Because HIV/AIDS and other sexually transmitted diseases (STDs) are transmitted through risky behaviors, they can be prevented through appropriate behavioral changes. People can learn to avoid the behaviors that place them at risk for HIV and STDs or to engage in safer variants of these behaviors (e.g., use condoms). At the present time, behavior change constitutes one of the primary means of preventing HIV/AIDS and other STDs. Consequently, there is a clear need for research on the effectiveness of behavioral interventions to prevent STDs/HIV in a wide variety of populations.

Behavioral interventions have been shown to reduce rates of unprotected sexual intercourse in a number of different populations (Jemmott, Jemmott, & Fong, 1992; Kelly, St. Lawrence, Hood, & Brasfield, 1989; Kelly et al., 1994; Peterson et al., 1996; Rotheram-Borus, Koopman, Haignere, & Davies, 1991; St. Lawrence et al., 1995). A growing body of scientific evidence indicates that although not all interventions have an impact on behavior, changes in risky behavior can occur as a result of well-designed interventions (see reviews by Academy for Educational Development, 1996; Holtgrave et al., 1995; Oakley, Fullerton, & Holland, 1995). A meta-analysis demonstrated that cognitive-behavioral HIV interventions significantly reduce HIV risk behaviors with small to moderate effect sizes (Kalichman, Carey, & Johnson, 1996). Moreover, a National Institutes of Health Consensus Panel concluded that behavioral interventions to reduce HIV/AIDS are effective and should be widely disseminated (National Institutes of Health, 1997).

Several authors have pointed out that HIV interventions that are grounded in psychological theory are generally more effective than interventions lacking a theoretical basis (Fisher & Fisher, 1992; Wingood & DiClemente, 1996). A dominant theory in the HIV risk behavior literature is the Information-Motivation-Behavioral Skills (IMB) model (Fisher & Fisher, 1992; Fisher, Fisher, Williams, & Mallow, 1994). Developed specifically to explain HIV risk behavior, this model of behavior change assumes that there are three main determinants of risk reduction: (1) information, (2) motivation, and (3) behavioral skills. The IMB model states that for individuals to change their behavior, they need information, motivation, and behavioral skills to facilitate the change. *Information* refers to basic knowledge about STD/HIV transmission and prevention. *Motivation* refers to personal attitudes about preventive behaviors (e.g., condom use), as well as perceived normative support for such behaviors. *Behavioral skills* for preventing STDs/HIV include social skills, appropriate assertiveness, and communication skills.

Although a substantial number of studies have implemented and evaluated behavioral interventions to prevent STDs/HIV, these studies have focused on civilian rather than military populations. Very little research has evaluated STD/HIV behavioral interventions among U.S. military personnel. Unsafe sex among military personnel is of particular concern because military members may be at especially high risk for STDs/HIV due to their demographic characteristics (e.g., young age and predominantly male gender), their frequent deployments, and their assignments to foreign countries with high rates of HIV. Previous studies of deployed military personnel have documented a number of factors that contribute to STD acquisition, including sexual contact with commercial sex workers, abuse of alcohol, and inconsistent use of condoms (Malone, Hyams, Hawkins, Sharp, & Daniell, 1993). Clearly, there is a need to

develop and evaluate STD/HIV prevention programs tailored for U.S. military populations.

Since 1994, the Naval Health Research Center (NHRC), San Diego, CA, has conducted research designed to prevent STDs and HIV among military personnel. In the first NHRC project ("Military-Based Intervention for the Prevention of STDs/HIV"), an intervention called the STD/HIV Intervention Program (SHIP) was developed and tested in a group of Marines on a Western Pacific deployment. The evaluation of this behavioral intervention indicated that it was successful in leading to a significant reduction in risky sexual behaviors and a reduction in alcohol use in the intervention group (Marines who were exposed to SHIP) compared with the control group (similar Marines who were not exposed to SHIP). Based on these results, it seemed feasible to transition this intervention to other military populations.

Preventive medicine technicians (PMTs) are Navy corpsmen who have obtained additional training in sanitation, epidemiology, industrial hygiene, and occupational health. During the course of their Navy careers, most PMTs will give formal training as well as provide one-on-one counseling on STDs/HIV to other military members. To become PMTs, Navy corpsmen must graduate from the PMT school at the Naval School of Health Sciences, San Diego. Therefore, the PMT school was identified as an appropriate venue for SHIP training.

The goals of this project were to modify the original SHIP intervention so that it would be appropriate for the PMT population, and to conduct a process evaluation of the intervention. Whereas the original version of SHIP was designed solely to change the behavior of the individuals receiving the training, the PMT version of SHIP was a "train-the-trainer" course. Consequently, the SHIP course was restructured so that it would prepare PMTs for delivering training to other service members to prevent STDs/HIV.

It was hypothesized that this STD/HIV train-the-trainer course would be considered useful by most PMTs at their first duty assignments after graduation from PMT school.

Method

Description of the Intervention

The original version of SHIP was an 8-hr cognitive-behavioral intervention, which was based heavily on the IMB model. The intervention was aimed at enhancing service members' knowledge of STDs/HIV, heightening their motivation to engage in safe behaviors and refrain from unsafe behaviors, and strengthening their behavioral and decision-making skills.

SHIP is a multifaceted skills-building intervention designed to modify behaviors associated with the acquisition of STDs/HIV. The SHIP intervention uses a variety of media to present information about STDs and HIV and their prevention. Specifically, slide presentations, interactive educational games, group discussions, and videos were developed or selected to present the following content areas: (1) the epidemiology of STDs and HIV/AIDS; (2) the transmission and prevention of STDs/HIV; (3) signs, symptoms, and outcomes of common STDs; (4) the clinical course of HIV/AIDS; (5) the impact of alcohol on unsafe sex; (6) correct condom use; and (7) values and opinions related to STD/HIV risk (see Table 1). Two videotapes, "HIV Legacy" and "Liberty Brief," were produced specifically for the SHIP intervention; a third videotape, "Condom-Eze," was also used to demonstrate the correct use of condoms.

Before modifying the original SHIP course for the PMT school, SHIP was presented to PMT school staff, and the school leadership approved the addition of this intervention to the PMT school curriculum. The modification effort was guided by information gathered from meetings with PMT school staff. Based on this information, a new version of SHIP was designed for the PMT school.

The modified version of SHIP developed for the PMT school was very similar to the original SHIP. The primary difference was that the PMT version of the program was longer and was restructured to fit a train-the-trainer format. Whereas the original version of SHIP took about 8 hr, the PMT version required approximately 13 hr, not including breaks. The main reason for the increase in course length was to allow time for the PMTs to engage in practice teaching. The program was designed to be given in 4 sessions, over the course of 2 days. An outline of the PMT version of SHIP is shown in Table 1.

To give the PMTs training and familiarity with presenting SHIP material, the PMT version of SHIP required the participants to prepare and deliver practice lectures. Due to time constraints, PMT students practiced the lectures only; they did not practice directing the exercises or the group discussions. Because Session 4 did not contain any lectures (see Table 1), the practice lectures were limited to the first three sessions of the program. In addition to delivering practice lectures, PMT students were given feedback on their performance from the SHIP instructor and from their classmates.

At program completion, all PMTs were provided with a complete set of course materials: the 105-page SHIP manual, the color slides, and the 2 NHRC-produced videos ("HIV Legacy" and "Liberty Brief"). PMTs were encouraged to bring these materials to their next duty assignment and use them in their own training.

Subjects

The PMT school course convenes 3 times per year, with an average of 20 graduates per class. All PMT students who went through the school between April 1997 and April 1999 participated in the PMT version of the SHIP course. Thus, 7 classes of PMTs received the intervention (April 1997, August 1997, December 1997, April 1998, August 1998, December 1998, and April 1999).

Course Evaluations

Starting with the December 1997 PMT class, course evaluation questionnaires were administered at the end of each SHIP course. Five classes of PMTs (December 1997, April 1998, August 1998, December 1998, and April 1999) completed course evaluation forms. A total of 109 course evaluation forms were completed.

The course evaluation questionnaire asked the students to rate the course overall, as well as the following specific aspects of the course: the instructor(s), lectures, videos, group discussions, and group exercises (e.g., games). These ratings were made on a 5-point response scale ranging from Unsatisfactory (1) to Excellent (5). The course evaluation form also asked, "How much did you learn from the program?", "Did you find the program useful in terms of reducing your personal risk for STDs/AIDS?", "How useful was the program in terms of preparing you to teach

others about STD/HIV prevention?", and "Would you recommend the program to other PMTs?" (presented with 5-point response scales). In addition, the form contained 3 open-ended questions: "What did you like most about the course?", "What did you like least about the course?", and "What parts of the course do you think you would be most likely to present or share with others at your next command?"

No identifiers nor any demographic information was gathered on the course evaluation questionnaires.

1-Year Follow-Up Telephone Interviews

Approximately 1 year after training, the PMTs from the first 4 classes that received the SHIP program were contacted by telephone for a follow-up interview. The purpose of the interview was to evaluate the intervention program and to determine its usefulness for this sample of PMTs. The telephone interview obtained a variety of information about training that the PMTs had given on STDs/HIV in the past year. First, PMTs were asked whether they had given any formal training on STDs/HIV in the past year. PMTs who had given training on STDs/HIV in the past year were asked a set of detailed questions about the training. These PMTs was asked how many training sessions they had given, the typical length of each session, how many people had typically been in each session, the total number of people they had trained in the past year, whether they had used any of the SHIP materials in the training, which SHIP materials they had used, and the topics that they had covered. In addition, PMTs were asked how useful they had found the SHIP training, what they liked most about the SHIP training, and what they liked least about the SHIP training.

Table 2 shows a distribution of the participants who were interviewed, by class date. Four classes of PMTs were targeted for the 1-year follow-up interviews: April 1997, August 1997, December 1997, and April 1998. The targeted population was composed of 76 PMTs; follow-up interviews were conducted with 73 of the 76 PMTs (96% response rate). The 3 PMTs whom we were unable to contact for the follow-up interview were on ships that were on extended deployments and could not be reached by telephone during the time frame of the study.

Results and Discussion

Course Evaluations

On the course evaluation questionnaire, participants were asked to rate the course overall as well as specific aspects of the course using the following 5-point scale: Unsatisfactory (1), Poor (2), Satisfactory (3), Good (4), and Excellent (5) (see Table 3). As Table 3 shows, satisfaction with the course overall was fairly high, with a mean rating of 4.15 on a 5-point scale. This indicates an average rating that falls just slightly above "Good." Mean ratings of specific aspects of the course (e.g., videos, lecture) were also fairly high, ranging from a low of 3.99 for Lecture to a high of 4.61 for Videos.

Responses to the questions, "How much did you learn from the program?", "How useful was the program in terms of preparing you to teach others about STD/HIV prevention?", "Did you find the program useful in terms of reducing your personal risk for STDs/AIDS?", and "Would you recommend this course to other PMTs?", are shown in Table 4. In response to the question, "How much did you learn from the program?", 52% of PMT students indicated that they had learned either "A great deal," or "A substantial amount." Twenty-four percent of the

PMTs said they had learned “A moderate amount.” The remaining 24% of the sample indicated that they had learned either “A slight amount” or “Very little” (see Table 4).

When asked, “How useful was the program in terms of preparing you to teach others about STD/HIV prevention?”, 46% of the participants indicated that it was “Very useful,” 28% thought it was “Useful,” and 17% thought it was “Moderately useful.” When asked, “Did you find the program useful in terms of reducing your personal risk for STDs/AIDS?”, 61% of PMTs answered either “Definitely yes” or “Yes.” In response to the question, “Would you recommend this course to other PMTs?”, 71% of the sample answered “Definitely yes” or “Yes” (see Table 4).

The course evaluation questionnaire also contained 2 open-ended questions: “What did you like most about the course?”, and “What did you like least about the course?” PMTs’ written open-ended responses to these questions were put into categories (see Table 5). When asked what they liked most about the course, the PMTs’ most common responses were that they liked the videos (38%), the group exercises/games/discussions (31%), and the course materials (i.e., manual, videos, and slides) that they were given to keep (17%). Smaller percentages of PMTs said that they liked the slides (10%), they liked everything (5%), or they liked giving the practice lectures (3%).

When asked what they liked least about the course, the most frequently given answer was “Nothing” or “I liked everything”; this response was given by 22% of the sample (see Table 5). Other frequently given answers to this question were that the course material was redundant with some of their previous PMT training (15%), the course was taught at too low of a level (11%), or the course was too long or too drawn out (11%). Smaller fractions of PMTs indicated that they did not like giving the practice lectures (10%), they did not like the group exercises/games/discussions (5%), the class did not provide enough breaks (3%), or too much class time was spent on lecture (3%).

An additional open-ended question on the course evaluation form asked, “What parts of the course do you think you would be most likely to present or share with others at your next command?” Responses to this question are shown in Table 5. The most prevalent responses were the videos (45%), followed by “The entire course” (23%). Smaller numbers of respondents indicated that they would be most likely to present the slides (18%), the information on STD/HIV prevention (12%), the information on alcohol in relation to unsafe sex (11%), or the group exercises/games/discussions (11%).

In summary, the course evaluation data indicated that the PMT students were fairly satisfied with the SHIP course overall, as well as with specific components of the course (e.g., videos, lectures). Most PMTs stated that they had learned new information from the program, had found the course to be useful in terms of preparing them to teach others about STD/HIV prevention, and would recommend the course to other PMTs. When asked what they liked most about the course, the responses revealed that participants particularly liked the videos; the group exercises, games, and discussions; and the course materials that they were given to keep. When asked what they liked least about the course, common criticisms were that the SHIP material was redundant with previous PMT coursework, the course was taught at too low of a level, and it was too long. However, the most common response to this question was “Nothing” or “I liked everything.” The parts of the course that the PMTs thought they would be most likely to present in their own training were the videos, the entire course, and the slides.

1-Year Follow-Up Interviews

Approximately 1 year after the training, follow-up interviews were conducted with 73 of the 76 PMTs (96% response rate; see Table 2). The sample that participated in the follow-up interviews were from 4 PMT classes (63 males, 10 females). Of the 73 participants, 71 were in the Navy; 2 were in the Coast Guard. The participants ranged in age from 20 to 42 ($M = 28.8$). Although all subjects were enlisted at the time they attended PMT school, by the time the follow-up interviews took place, 1 subject had become an officer (O-1). The remaining 72 enlisted participants ranged in paygrade from E-3 to E-7, with a median paygrade of E-5. Most of the participants (80%) had some college but did not have a 4-year degree, 12% had a 4-year degree, and 8% were high school graduates only. At the time of the follow-up interview, 64% of the sample were assigned to shore commands, and 36% were aboard ships.

In the follow-up interview, participants were asked, "Have you done any training on STDs/HIV in the past 12 months?" Of the 73 participants, 57 (78%) indicated that they had given some formal training on STDs/HIV in the past year. Because most of the subsequent questions were only asked of the PMTs who had given training in the past year, the remaining results are based on a sample of 57, unless otherwise noted.

Participants who had given STD/HIV training in the past year ($n = 57$) were asked how many training sessions they had given, the typical length of each session, the total number of people they had trained, the SHIP materials they had used, and the topics they had covered. These questions were asked as open-ended questions. However, to simplify presentation of results, the responses are shown in categories (see Table 6).

The number of STD/HIV training sessions given by PMTs in the past year ranged from 1 to 35, with a median of 5 sessions. The majority of PMTs who had given STD/HIV training in the past year (57%) had given 6 or fewer training sessions; however, 12% of the sample had given 16 or more training sessions. When asked about the typical length of the training sessions, a wide variety of session lengths were reported, ranging from 20 min to 6 hr, with a median session length of 60 min. Most of the PMTs gave training sessions that were between 40 and 75 min long. Only about one quarter (26%) of the sample reported giving training sessions that were 80 min or longer. The total number of people PMTs had given STD/HIV training to in the past year ranged from 30 to 3,500, with a median of 330 people. Most PMTs (68%) reported giving training to between 30 and 600 people in the past year.

PMTs were asked whether they had used (1) the manual, (2) the videos, and/or (3) the slides in the STD/HIV training that they gave in the past year. As shown in Table 6, 68% of the PMTs had used the SHIP manual, 63% had used one or both of the videos, and 47% had used at least some of the slides (Because participants could endorse multiple-response options, the percentages sum to more than 100). Several PMTs spontaneously mentioned that they had not used the slides because they did not have access to a slide projector at their command.

The PMTs were also asked whether the training that they gave on STDs/HIV had covered the following 6 topics: (1) How HIV/STDs are transmitted, (2) How HIV/STDs can be prevented, (3) Clinical description of STDs, (4) Clinical description of HIV/AIDS, (5) Alcohol and unsafe sex, and (6) Correct condom use. These topics correspond to the main topics covered in the SHIP training the PMTs received. Most of the PMTs had covered each of the major SHIP topics (see Table 6). The most widely covered topics were, "How HIV/STDs can be prevented"

(98%), followed by “Clinical description of STDs” (95%). The remaining topics were also covered by the vast majority of the PMTs. “Clinical description of HIV/AIDS” was covered by 91% of PMTs, “Correct condom use” was covered by 88%, “Alcohol and unsafe sex” was covered by 79%, and “How HIV/STDs are transmitted” was covered by 78% of the sample.

PMTs who had given training in the past year ($n = 57$) were asked the open-ended question: “In the training that you gave on STDs/HIV, what were the main points that you think you emphasized to the people you trained (i.e., the “take-home message”)?” Participants could give multiple answers to this question; responses are shown in Table 6. The most common take-home message reported by PMTs was “Use a condom”; this answer was given by 70% of PMTs. Other common responses to this question were: “Practice abstinence” (32%), and “Be aware that alcohol can lead to unsafe sex” (28%). Smaller percentages of PMTs said that they emphasized the following points: “Anyone can get an STD/HIV” (14%), “Use the buddy system” (11%), “Be careful in foreign ports” (11%), and “Seek immediate medical help if you think you might have an STD” (7%).

Responses to the next set of questions were gathered from all PMTs who were interviewed ($N = 73$), regardless of whether they had given training on STDs/HIV in the past 12 months. Results from this set of interview questions are shown in Table 7. PMTs were asked what they liked most and what they liked least about SHIP training. The aspects of the course PMTs liked the most were the videos (34%), the slides (21%), the materials overall (19%), the instructor (11%), and the practice lectures (10%). When asked what they liked least about the training, the most common answer by far was “I liked everything” (41%). Other frequently given answers were “The course was too long” (12%), “The course was too short” (10%), and “Some parts were boring” (8%).

In response to the question, “How useful did you find the STD/HIV training (at the PMT school)?”, most of the respondents rated the training as either “Very useful” (48%), “Useful” (36%), or “Moderately useful” (14%). Only 2% of the PMTs stated that the training was either “Slightly useful” or “Not at all useful.” When asked, “What would you say is the likelihood that you will be giving any training on STDs/HIV in the next 12 months?”, 71% of the PMTs stated that it was “Very likely”, 10% stated that it was “Likely”, and 5% stated that it was “Moderately likely” (see Table 7). Thus, the vast majority of the sample (86%) believed that they would be giving training on STDs/HIV during the next year.

PMTs who had not given STD/HIV training during the past year ($n = 16$) were asked why they had not given any such training. The reason indicated by the vast majority of these PMTs was that other medical personnel at their command were responsible for giving the command’s STD/HIV training.

In summary, the results of the 1-year follow-up interviews revealed that more than three quarters of the PMTs (78%) had given some formal training on STDs/HIV during the past year. The median number of training sessions that PMTs had given was 5 and the median session length was 1 hr. The median number of people the PMTs had given STD/HIV training to was 330. When asked which SHIP materials they had used in giving their own STD/HIV training in the past year, 68% of the sample said they had used the manual, 63% had used one or both of the videos, and 47% had used some or all of the slides. The vast majority of PMTs had covered most of the key SHIP topics in their own STD/HIV training. The aspects of the training that PMTs reported liking the most 1 year after the training were the videos, the slides, and the materials

overall. The aspect of the training that the PMTs reported liking the least was the length; however, some participants thought the course was too long and some thought it was too short. In addition, 1 year after the training, most PMTs stated that they had found SHIP training useful.

Both the course evaluation results and 1-year follow-up interview results indicate that PMTs liked the videos more than any other aspect of the SHIP course. "Videos" was the most common response to the course evaluation question asking what they liked the most about SHIP, as well as the most common response to the same question when it was asked in the 1-year follow-up interview. "Videos" was also the component of the course that received the highest ratings on the course evaluation forms. Moreover, "Videos" was overwhelmingly the most common answer to the follow-up interview question asking PMTs what parts of the course they thought they would be the most likely to present to others. These results are not very surprising. The videos used in the SHIP course were created specifically for military populations and were very engaging; the fact that the PMTs were given the two longer videos to keep may have added to their appeal.

A component of the SHIP course that received a very different response on the course evaluation forms versus the follow-up interviews was "group exercises/games/discussions." A fairly large percentage of PMTs (31%) gave an answer falling into this category in response to the question on the course evaluation form asking what they liked the most about the course. However, when the same question was posed to them in the follow-up interviews, only 8% chose this response. It may be that the PMTs found the group exercises, games, and discussions engrossing and stimulating at the time of the SHIP course but these activities did not make a long-term impression on them.

Considered together, the course evaluation and 1-year follow-up interview results show that the PMTs were fairly satisfied with SHIP. Most of the participants indicated that they had learned a substantial amount from the course and had found it useful in preparing them to teach others about STD/HIV prevention. PMTs particularly liked the course videos, and a large percentage (63%) did in fact use one or both of the videos in their own STD/HIV training.

Conclusions

Each of the objectives of this study were achieved. The original SHIP course was modified to make it appropriate for the PMT population and to fit a train-the-trainer format. In addition, a process evaluation of the intervention was conducted. The PMT students were fairly satisfied with SHIP overall, as well as with specific components of the course. About three quarters of PMTs had given some formal training on STDs/HIV in the year preceding the interview. As hypothesized, the SHIP train-the-trainer course was considered useful by most PMTs in their first duty assignments after graduation from PMT school.

References

- Academy for Educational Development (1996). *What intervention studies say about effectiveness: A resource for HIV prevention community planning groups*. Washington, DC: Academy for Educational Development.
- Centers for Disease Control and Prevention (1998). *HIV/AIDS surveillance report, 10* (No. 2). Atlanta, GA: CDC.
- Fisher, J. D., & Fisher, W. A. (1992). Changing AIDS-risk behavior. *Psychological Bulletin, 111*, 455-474.
- Fisher, J. D., Fisher, W. A., Williams, S. S., & Mallow, T. E. (1994). Empirical tests of an Information-Motivation-Behavioral Skills model of AIDS preventive behavior. *Health Psychology, 13*, 238-250.
- Holtgrave, D. R., Qualls, N. L., Curran, J. W., Valdiserri, R. O., Guinan, M. E., & Parra, W. C. (1995). An overview of the effectiveness and efficiency of HIV prevention programs. *Public Health Reports, 110*, 134-146.
- Jemmott, J. B., Jemmott, L. S., & Fong, G. T. (1992). Reduction in HIV risk—Associated sexual behaviors among black male adolescents: Effects of an AIDS prevention intervention. *American Journal of Public Health, 82*, 372-377.
- Kalichman, S. C., Carey, M. P., & Johnson, B. T. (1996). Prevention of sexually transmitted HIV infection: A meta-analytic review of the behavioral outcome literature. *Annals of Behavioral Medicine, 18*, 6-15.
- Kelly, J. A., Murphy, D. A., Washington, C. D., Wilson, T. S., Koob, J. J., Davis, D. R., Ledezma, G., & Davantes, B. (1994). HIV/AIDS prevention for women seen in primary health care clinics: Effects of intervention to change high-risk sexual behavior patterns. *American Journal of Public Health, 84*, 1918-1922.
- Kelly, J. A., St. Lawrence, J. S., Hood, H. V., & Brasfield, T. L. (1989). Behavioral intervention to reduce AIDS risk activities. *Journal of Consulting and Clinical Psychology, 57*, 60-67.
- Malone, J. D., Hyams, K. C., Hawkins, R. E., Sharp, T. W., & Daniell, F. D. (1993). Risk factors for sexually transmitted diseases among deployed US military personnel. *Sexually Transmitted Diseases, 20*, 294-298.
- National Institutes of Health (1997). Interventions to prevent HIV risk behaviors. *NIH Consensus Statement Online, 15*, 1-41, Feb 11-13, 1997. Bethesda, MD: National Institutes of Health. Available at <http://consensus.hiv.gov/>. Accessed May 5, 1998.
- Oakley, A., Fullerton, D., & Holland, J. (1995). Behavioural interventions for HIV/AIDS prevention. *AIDS, 9*, 479-486.

Peterson, J. L., Coates, T. J., Catania, J., Hauck, W. W., Acree, M., Daigle, D., Hillard, B., Middleton, L., & Hearst, N. (1996). Evaluation of an HIV risk reduction intervention among African-American homosexual and bisexual men. *AIDS, 10*, 319-325.

Rotheram-Borus, M. J., Koopman, C., Haignere, C., & Davies, M. (1991). Reducing HIV sexual risk behaviors among runaway adolescents. *Journal of the American Medical Association, 266*, 1237-1241.

St. Lawrence, J. S., Brasfield, T. L., Jefferson, K. W., Alleyne, E., O'Bannon, R. E., & Shirley, A. (1995). Cognitive-behavioral intervention to reduce African-American adolescents' risk for HIV infection. *Journal of Consulting and Clinical Psychology, 63*, 221-237.

Wingood, G., & DiClemente, R. J. (1996). HIV sexual risk reduction interventions for women: A review. *American Journal of Preventive Medicine, 12*, 209-217.

Table 1
Outline of STD/HIV Intervention Program for PMTs

Session One			
Module 1	Introduction and Ground Rules	15 min	slides/lecture
Module 2	Overview of STDs/HIV/AIDS	10 min	slides/lecture
Module 3	Transmission of STDs and HIV	15 min	slides/lecture
Module 4	Prevention	10 min	slides/lecture
Module 5	Values Voting	30 min	small group exercise
Module 6	Risk Evaluation	30 min	small group exercise
Module 7	Student Practice Lectures	80 min	group exercise
Session Two			
Module 1	STD Outcomes	20 min	slides/lecture
Module 2	Physical Outcomes	15 min	slides/lecture
Module 3	HIV/AIDS Clinical Course	15 min	slides/lecture
Module 4	Feelings and Opinions Survey	30 min	small group exercise
Module 5	Video: "Liberty Brief"	40 min	video and discussion
Module 6	Student Practice Lectures	80 min	group exercise
Session Three			
Module 1	HIV Quiz Game	30 min	group exercise/game
Module 2	Risk/Prevention of STDs/HIV on Deployment	20 min	slides/lecture
Module 3	Alcohol Use and Abuse	10 min	slides/lecture
Module 4	Reasons for Drinking	20 min	slides/lecture
Module 5	Alcohol Use in the Military	15 min	slides/lecture
Module 6	Commitment to Drinking Responsibly	10 min	contract
Module 7	Alcohol Use and Sexuality	30 min	small group exercise
Module 8	Video: "HIV Legacy"	30 min	video and discussion
Module 9	Student Practice Lectures	120 min	group exercise

Table 1 (Continued)

Session Four			
Module 1	Prevention Baseball	30 min	group exercise/game
Module 2	Role Play: Sexual Decision-Making	30 min	group exercise
Module 3	Steps to Correct Condom Use	20 min	group exercise
Module 4	Video: "Condom-Eze"	15 min	video and discussion
Module 5	Wrap-Up and Questions	15 min	discussion

Table 2

PMTs Who Participated in 1-Year Follow-Up Interviews

Class Date	N Total	N Interviewed
April 1997	14	13
August 1997	21	21
December 1997	26	25
April 1998	15	14
Total	76	73

Note: The response rate was 96%.

Table 3
PMT Course Evaluation Ratings

Course Element	Mean Rating	<i>SD</i>
Course overall	4.15	.90
Instructor(s)	4.17	.90
Lecture	3.99	.92
Videos	4.61	.61
Group discussions	4.00	.89
Group exercises (e.g., games)	4.07	.93

Note: Ratings were made on a scale of 1 to 5: Unsatisfactory (1), Poor (2), Satisfactory (3), Good (4), and Excellent (5).

N = 109.

Table 4
PMT Course Evaluation Responses

Question	Percentage
How much did you learn from the program?	
A great deal	25%
A substantial amount	27%
A moderate amount	24%
A slight amount	13%
Very little	11%
How useful was the program in terms of preparing you to teach others about STD/HIV prevention?	
Very useful	46%
Useful	28%
Moderately useful	17%
Slightly useful	7%
Not at all useful	2%
Did you find the program useful in terms of reducing your personal risk for STDs/AIDS?	
Definitely yes	41%
Yes	20%
Unsure	17%
No	16%
Definitely no	6%
Would you recommend this course to other PMTs?	
Definitely yes	52%
Yes	19%
Unsure	14%
No	10%
Definitely no	5%

N = 109.

Table 5

PMT Open-Ended Course Evaluation Responses

Question	Percentage
What did you like most about the course? (N = 100)	
Videos	38%
Group exercises/games/discussions	31%
Course materials	17%
Slides	10%
I liked everything	5%
Giving practice lectures	3%
What did you like least about the course? (N = 93)	
Nothing/I liked everything	22%
Material was redundant with other parts of PMT training	15%
Taught at too low of a level	11%
Too long/too drawn out	11%
Giving practice lectures	10%
Group exercises/games/discussions	5%
Not enough breaks	3%
Too much lecture time	3%
What parts of the course do you think you would be most likely to present or share with others at your next command? (N = 100)	
Videos	45%
The entire course	23%
Slides	18%
Information on prevention	12%
Information on alcohol and unsafe sex	11%
Group exercises/games/discussions	11%

Note: Percentages do not sum to 100 because multiple answers were permitted, and answers given by fewer than 3 respondents are not shown.

Table 6

Characteristics of STDs/HIV Training Given by PMTs During Past 12 Months

Characteristic	Percentage	
Number of training sessions		
1-3 sessions	25%	
4-6 sessions	32%	
7-9 sessions	17%	
10-15 sessions	14%	
16 or more sessions	12%	<i>Mdn: 5 sessions</i>
Length of training sessions		
0-35 min	14%	
40-55 min	25%	
60-75 min	35%	
80 min or longer	26%	<i>Mdn: 60 min</i>
Total number of people trained		
30-60	17%	
61-200	19%	
201-400	16%	
401-600	16%	
> 600	32%	<i>Mdn: 330</i>
Specific materials from SHIP PMTs used in own STD/HIV training^a		
Manual	68%	
Video(s)	63%	
Slides	47%	
Topics covered by PMTs in their own STD/HIV training^a		
How HIV/STDs are transmitted	78%	
How HIV/STDs can be prevented	98%	
Clinical description of STDs	95%	
Clinical description of HIV/AIDS	91%	
Alcohol and unsafe sex	79%	
Correct condom use	88%	

Table 6 (Continued)

Characteristic	Percentage
Main points emphasized (i.e., the “take-home message”) ^a	
Use a condom	70%
Practice abstinence	32%
Alcohol can lead to unsafe sex	28%
They are susceptible to STDs/HIV	14%
Use the buddy system	11%
Be careful in foreign ports	11%
Seek immediate medical help if think you might have an STD	7%

N = 57.

^aPercentages exceed 100 because multiple answers were permitted.

Table 7

PMT 1-Year Follow-Up Interview Responses

Question	Percentage
What did you like most about the STDs/HIV training?^a	
Videos	34%
Slides	21%
Materials overall	19%
Instructor	11%
Practice lectures	10%
Group exercises/games/discussions	8%
Course manual	7%
What did you like least about the STDs/HIV training?^a	
I liked everything	41%
The course was too long	12%
The course was too short	10%
Some parts were boring	8%
Practice lectures	5%
Games/group exercises/discussions	5%
How useful did you find the STD/HIV training (at PMT school)?	
Extremely useful	48%
Useful	36%
Moderately useful	14%
Slightly useful	1%
Not at all useful	1%
What would you say is the likelihood that that you will be giving any training on STDs/HIV in the next 12 months?	
Very likely	71%
Likely	10%
Moderately likely	5%
Unlikely	10%
Very unlikely	4%

N = 73.

^aPercentages do not sum to 100 because multiple answers were permitted, and answers given by fewer than 3 respondents are not shown.

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